

Accession	Gene	Protein	Function	Location/Qualifiers
Db 4207	gtaactaagagtcacaacagatgtgaagagctgtgatlgtat			
Qy 4275	atagaataggtctgtgcaaaacccacttggaaatgcagaataa			
Db 4267	atagaataggtctgtgcaaaacccacatgtgaatgcagaataa			
Qy 4335	ttgatatttaagatttgtagcggaactatgtgacgttcac			
Db 4327	ttgatatttaagatttgtagcggaactatgtgacgttcac			
Qy 4395	ggtctgcgcagcttggccgcttgcgttctagaactcagcc			
Db 4387	ggtttacgagatgtggctcttcgttcttgaactcaccct			
Qy 4455	agagagctgtgtgaaatccggtcttcggtaccagtgtag			
Db 4447	agagagctgtgtgaaatccggtcttcggtaccagtgtag			
Qy 4515	tctaatggaacagagatagtcacaacccggagagagaataa			
Db 4507	t-----acgtatgaacacagatgtgtcacaacagagaataa			
Qy 4575	cgcctaaccgacgcccctccacgcccacttgaagaagccaga			
Db 4560	tgaatattcagcgcacatgagatgacacgttgaacgagagc			
Qy 4634	cctaagcatgtgattgacaatcatctacgttaccatacgtat			
Db 4620	cctaagcatgtgattgacaatcatctacgttaccatacgtat			
RESULT 6				
AAO79325				
ID AAO79325	standard; cDNA; 3260 BP.			
XX AAO79325;				
XX 28-JUN-1995	(first entry)			
XX Mammalian MEK kinase (MEK1) cDNA.				
XX MEK kinase; MEK1; mitogen-activated protein kinase regulator;				
XX MARK; cell atrophy inhibition; Parkinson's; Alzheimer's; cancer;				
XX autoimmune diseases; allergies; wound healing; oncogenes;				
XX tumour agents; neurotropic growth factor; ds.				
XX OS Mus musculus.				
XX Key Location/Qualifiers				
XX CDS 486..2504				
XX FT /*tag- a				
XX W09424159-A.				
XX 27-OCT-1994.				
XX 15-APR-1994;	94MO-US04178.			
XX 15-APR-1993;	93US-0049254.			
XX (NAME-) NAT JEWISH CENT IMMUNOLOGY & RESPIRATORY.				
XX Johnson GL;				
XX WPI: 1994-357747/44.				
XX P-PSDB: AAR66029.				
XX New MEK kinase protein and related antibodies and nucleic acid				
XX regulator of mitogen activated protein kinase, useful				
XX therapeutically to inhibit cell atrophy, to screen for oncogenes				
XX etc.				
XX Claim 6; Page 8; 84pp; English.				

Dh	780	tcgacagcagctgagccgagcgtctctctgtgaagattctccagcttcaacaacaacagaaacaeca	839
Qy	2832	aagccacacgggtttcaaaaaaagaagcagaccccaacagttcagttgtttgaactctccctcttg	2891
Dh	840	aagccagcaggtttcaaaaaaagaagcagaccccaacagttcagttgtttgaactctccctcttg	899
Qy	2882	tctcatgtcctaattaatggtttccagcaccaatcagcccttgttctctctgcccgtctgtc	2951
Dh	900	tctcatgtcctaattaatggtttccagcaccaatcagcccttgttctctctgcccgtctgtc	959
Qy	2952	ccgaattttcttaagcccaaaccccgagattgttccctctgnaaaatccttcgcagctc	3011
Dh	960	ccgaattttcttaagcccaaaccccgagattgttccctctgnaaaatccttcgcagctc	1019
Qy	3012	cctcagaacacagcgcgaagttctctctcaaatcccaagaagacctgtcttbaaacccgagac	3072
Dh	1020	cctcagaacacagcgcgaagttctctctcaaatcccaagaagacctgtcttbaaacccgagac	1079
Qy	3072	tcagaaacagctctcccaagctctcaactcagtcagagaaccccaacccctccagtaacaatac	3131
Dh	1080	tcagaaacagctctcccaagctctcaactcagtcagagaaccccaacccctccagtaacaatac	1139
Qy	3132	agggccaaagccatctcccgagcccggtctccgggcagttacaaagaacactgagggaacgcca	3191
Dh	1140	agggccaaagccatctcccgagcccggtctccgggcagttacaaagaacactgagggaacgcca	1199
Qy	3192	agtgacatgacacttgatctcggggcagttgtctccaggttgtagaagaagctttggcggcg	3251
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Dh	1260	ggccaacgttgagcaacgcggttcatacccaagcgaacgaacagtggttccagcgcggtgagagac	1319
Qy	3312	aagtgacaggttgatagttggaacacccgggtcccaactccagatctcgaagagacctttgaaga	3371
Dh	1320	aagtgacaggttgatagttggaacacccgggtcccaactccagatctcgaagagacctttgaaga	1379
Qy	3372	tcacatgcttccaagtgtgacacgaacagtcacattccaagtccgaagtcgcgtctctctctcg	3431
Dh	1380	tcacatgcttccaagtgtgacacgaacagtcacattccaagtccgaagtcgcgtctctctctcg	1439
Qy	3432	gaaaagcgcgaaaaatgacgaacacctcaaaagacgaacgttcaatcataatcaaaagtgc	3491
Dh	1440	gaaaagcgcgaaaaatgacgaacacctcaaaagacgaacgttcaatcataatcaaaagtgc	1499
Qy	3442	gaaaagctggaagctggaaggggagggaggggttttagcgaatcgcacatgycgaatgacagctc	3551
Dh	1500	gaaaagctggaagctggaaggggagggaggggttttagcgaatcgcacatgycgaatgacagctc	1559
Qy	3552	cagatgacccctcccccacatcgtcctctcaagctgcgaaggtgnaaaatcggggaagaatacttca	3611
Dh	1560	cagatgacccctcccccacatcgtcctctcaagctgcgaaggtgnaaaatcggggaagaatacttca	1619
Qy	3612	attcagaaggaacacacacagaagaactcttccagggacatacaaaagcgaacagctcttaca	3671
Dh	1620	attcagaaggaacacacacagaagaactcttccagggacatacaaaagcgaacagctcttaca	1679
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Dh	1680	gaagaacgcctgagctgagctggaagggcgaagcgaataagcctctgagacattctctccgttac	1739
Qy	3732	caagcacaaggaattctgggggaatttggaactttaatgacctgtaaaacaggttagcagctcaga	3791
Dh	1740	caagcacaaggaattctgggggaatttggaactttaatgacctgtaaaacaggttagcagctcaga	1799
Qy	3792	aacacatctcccgagcagggagggagggctgtgaggaagcgtttgagggaaagaaatccggatgtg	3851
Dh	1800	aacacatctcccgagcagggagggagggctgtgaggaagcgtttgagggaaagaaatccggatgtg	1859
Qy	3852	ggtcactcctaacaatccaacaatcatcgcgaatgtctgggggccaagctgcgagaagaagcaac	3911
Dh	1860	ggtcactcctaacaatccaacaatcatcgcgaatgtctgggggccaagctgcgagaagaagcaac	1919

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XX 27-OCT-1994.
 PD 15-APR-1994; 94MO-US04178.
 XX 15-APR-1993; 930S-0049254.
 PR (NAJE-) NAT JEWISH CENT IMMUNOLOGY & RESPIRATORY.
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 PT etc.

Claim 6: Page 8; 84pp: English.

AA079325 encodes AAR66029 the mammalian MEK kinase (MEK 1), other
 CC unique mammalian MEK kinases identified by PCR are described in
 CC AAR66030 (MEK 2), AAR66031 (MEK 3) and AAR66032 (MEK 4). MEK is an
 CC activator, independent of Raf protein, of mitogen-activated protein
 CC kinases (MAPK). Inactivation of MEK can be used in the treatment
 CC of some cancers, autoimmune diseases and allergies, while
 CC stimulation can promote wound healing. MEK can also be used to
 CC alleviate cellular atrophy in Parkinson's or Alzheimer's by acting
 CC as a neurotrophic growth factor, and to screen for oncogenes and
 CC tumour agents.

SO Sequence 3260 BP; 869 A; 837 C; 793 G; 761 T; 0 other:

alignment_scores:
 Quality: 4252.00 Length: 834
 Ratio: 5.104 Gaps: 0
 Percent Similarity: 99.880 Percent Identity: 99.880

alignment_block:
 US-09-403-075-4 x AA079325 ..

Align seg 1/1 to: AA079325 from: 1 to: 3260

660 TyrThrProCysHisSerLeuAlaGluArgIleuLeuGlnArgLeu 676
 1 TACACTCTCTGCCACAGCTGCGCAAGAAATCAAACTTCAGAGACTCCT 50
 676 uatgPrvAlaValasprThrlleuValIysCysAlaAspAlaasnsra 693
 51 CCGGCCAGTGTGTACACTATCTCTGTCMAAGTGCAGATCC. AACAGCC 99
 693 rgtHrSerGlnLeuSerIleSerThrValLeuGlnLeuCysLysGlyGln 709
 100 GCACGAGATCAGCTGTCATATCTACATGCTGCACTCTGCAAGGCGCA 149
 710 AlagIlyGlnLeuAlaValIyArgGlnIleuLysAlaGlySerIleG 726
 150 GCAGGAGAGCTGGCGGTGGAGAAATCTAAAGCTGGGTCACAGCG 199
 726 yvalIyGlyValasprValLeuSerCysIleLeuGlyAsnGlnAlaG 743
 200 GGTGTGTGGTGTGATTAAGTCTTAATCTTGAAGAACCAAGCTG 249
 743 luserAsnAsnTTPGlnGlnLeuGlnIyArgLeuCysLeuIleAspArg 759
 250 AATCAAAACAATGCGCAAGAACTGCTGGGCTGCTGTATATAGACAGG 299
 760 LeuLeuGlnIyPheProAlaGlnIyPheTyrProHisIleValSerThrAs 776
 300 TTGCTGTGGAAATTCCTGCTGAATCTATCTCATATGTGTGACTACTGA 349

776 pValSerGlnAlaGluProValGlnLeuArgTyrIleLysLeuLeuSerL 793
 350 TGTCTCACAGCTGAAGCTGTGAAATCAGTACAGAAAGCTGTCTCC 399
 793 euLeuThrPheAlaLeuGlnSerIleAspAsnSerHisSerMetValGly 809
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 810 LysLeuSerArgArgIleTyrLeuSerSerAlaArgMetValThrAla 826
 450 AAGCTCTCTCGGAGATATATCTGAGCTGTGCGAGATGTCAGCCGAGT 499
 826 lProAlaValPheSerLysLeuValThrMetLeuAsnAlaSerGlySer 843
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 1100 CTTCACCTGATCAAGACCCCACTCTCCAGTACACTACAGGCCAAAGC 1149
 1043 roSerArgProValProGlySerThrSerLysLeuGlyAspAlaThrLys 1059
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 1060 SerSerMetThrLeuAspLeuGlySerAlaSerArgCysAspAspSerPh 1076
 1200 AGTACATGACACTTGTATCTGGGAGTGTCTCCAGGTGTGACGAGACTT 1249
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